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AUTHOR Wohlferd, Gerald H.
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ABSTRACT

Conclusions reached after three years of performance contracting experience and materials with which to judge the validity of the conclusions are presented in this overview of performance contracting. The conclusions are: (1) commercial firms are no better at teaching children than are public schools; (2) commercial firms expend as much or more money than public schools to do the same job; (3) material incentives do not persuade children to learn faster; (4) some companies yield to temptation and use questionable methods to assure making a profit; and (5) a low teacher/pupil ratio is effective in producing desirable achievement gains. The supporting materials are contained in two appendixes. Appendix A is a listing of those performance contracts for which evaluative data are available. Included for each contract are objectives to be reached, methods of teaching employed, and evaluation of results identified as to the person or organization who made the evaluative statement. Appendix B contains a bibliography of publications, articles, and news releases dealing with performance contracting. The bibliography is divided into three main categories: I. Theoretical Discussions, II. Descriptions of Contract Situations; and III. Evaluative Articles. Category I has been subclassified into: A. General Statements, B. Contract Specifics, C. Favorable, and D. Unfavorable. The bibliography, covering roughly from May 1970 to October 1972, is not considered to be all-inclusive. (FB)

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PERFORMANCE CONTRACTING OVERVIEW

Gerald H. Wohlferd, Associate in Education Research

The University of the State of New York
THE STATE UNIVERSITY OF NEW YORK

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PERFORMANCE CONTRACTING OVERVIEW

Performance contracting as an educational accountability scheme has fallen from grace. Its rise and fall have been swift. The first contract in this last cycle¹ started in September of 1969. The now famous (or infamous) Texarkana performance contract was the only formal contract during the first year. The second year (1970-71) however, saw a dramatic rise in performance contracts. Though estimates vary, performance contracts in force during the 1970-71 school year ranged from the thirties to and exceeding a hundred. A true count is difficult to obtain since contracts which were in the negotiation stage, but which were never formalized, were sometimes counted as operating contracts. The locations of about fifty operating contracts have been identified in the literature.

Three school years of performance contracting experience have now passed. How has performance contracting as an accountability system fared? Have the contractors met their guarantees? Have the commercial firms been able to teach children better than school personnel? Were the new techniques cheaper?

Evaluative reports have been published pertaining to about thirty performance contracts. There were four major sources of evaluative reports. Two were funded from federal sources, while the two remaining were by educational associations. RAND Corporation, engaged by the U.S. Office of Education (U.S.O.E.) to conduct a survey of several performance

¹Harding, Gladys. "A Hundred Years Before Texarkana." Journal of Educational Research. Vol. 64, May 1971. Inside cover.

²Elam, Stanley. "The Age of Accountability Dawns in Texarkana." Phi Delta Kappan. Vol. 51, No. 10, June 1970. pp. 509-514.

contracts, reported on five contracts. Battelle Memorial Institute conducted the evaluation of the 18 U.S. Office of Economic Opportunity (U.S. O.E.O.) contracts. Mrs. Sylvia Brotman surveyed and reported on the progress and outcome of many performance contracts for the National Education Association (NEA). And finally, the American Federation of Teachers (AFT) has published several reports in their newspaper, The American Teacher. Of course the above persons and organizations do not exhaust the list of evaluators. However, the four mentioned above have published reports on the greatest number of performance contracts.

Factual support of performance contracting is hard to find. Such a dearth may in itself be a measure of the success of performance contractors, since many companies had invested heavily in performance contracts, and many school administrators had actively pursued performance contracts. Because of the above reasons one would assume that successful contracts would have received wide publicity. The lack of positive reports is, therefore, all the more suggestive of poor results.

Each of the four evaluators has broadly summarized his more detailed reports. The Rand (U.S. Office of Education) report³ mentioned "promise of being able to introduce change into the schoolhouse," as a positive value. Change, however, is not generally considered to be an accountability factor, unless the change is directly related to student achievement.

The American Teacher (AFT)⁴ labeled performance contracting as "a fraud or a failure." This latter opinion was somewhat echoed by

³Carpenter, Polly, and Hall, George R. Case Studies in Performance Contracting: Conclusions and Implications, No. 1. Rand Corporation, Santa Monica, Calif. Dec. 1971. xvi-51.

⁴"A Report on Performance Contracts." American Teacher. Sept. 1971. pp. 19-20.

Sylvia Brotman (NEA)⁵ who described performance contracting as a "costly failure."

Finally, the Battelle⁶ report dealt a mortal blow to performance contracting by answering its own question, "was performance contracting more successful than traditional classroom methods in improving the reading and math skills of poor children?" by the flat, terse word, "No." This finding is most damaging since U.S. O.E.C. hired a management consultant firm to coordinate the study and engaged a research firm to set up the research design, conduct the testing and analyze the findings. Because U.S. O.E.O. was so careful in the conduct of the experiment, it has been difficult for theorists to counter the Battelle findings.

As previously stated, the above statements by the four major evaluators are summaries based upon their research into the success of contracts in individual districts. Though summaries are valuable in yielding a synthesis, they hide the number, range and magnitude of individual measures encompassed by the summary. Such is true of the summaries by the major evaluators. While the greater number of the contracts must be considered as failures, a few were successful.

For example, six companies contracted with the U.S. O.E.O. to conduct three contract centers each. Each of the contractors used slightly different procedures. Furthermore, each contractor was

⁵Brotman, Sylvia. "Performance Contracting I: How to Get Little Learning at High Costs with More Technology and Less Accountability." The Washington Memo. NEA Division of Field Services. Washington, D.C. Jan. 1971.

⁶"An Experiment in Performance Contracting: Summary of Preliminary Results." U.S. Office of Economic Opportunity. Feb. 1, 1972.

assigned three districts located in different sections of the country. Though Battelle did not report on the effectiveness of each of the contractors, evaluative results were given for each of the school districts. As a listing, which identified school districts with their respective contractors was available, it was easy to determine contractor success. Plan Education Centers registered the best record. Their educational procedures involved individualized instruction through the use of teaching machines. Very few material incentives were offered. Most interesting, however, was the ratio of pupils to teachers and paraprofessionals. At five to one it was well below that of the less successful contracts. The most successful performance contracts were located in the southeastern and south central sections of the U.S. Also of note were the locations of the least successful contract sites. Those located in northeastern and north central states garnered more progress for the control groups than that of the experimental groups.

What happened in the third year? Articles dealing with performance contracting now appear with decreased frequency in the professional literature. Thus, hard facts are difficult to discover. Yet, enough is written to indicate that performance contracting has definitely waned. It is estimated that about ten performance contracts were in operation in the 1971-72 school year. Gary, Indiana, one of those, had signed a four year contract with BRL (Behavior Research Laboratories). No second nor third year progress reports have been issued by Gary, but the Gary board has voted to withdraw from the fourth year of the contract. Apparently a number of companies which had engaged in performance contracting have either gone out of business or lopped off their performance contracting arm.

Now that the performance contract fever has nearly abated, what

can be learned from this experience? Several interesting conclusions can be drawn:

1. commercial firms are no better at teaching children than are public schools,
2. commercial firms expend as much as, or more money than public schools to do the same job,
3. material incentives do not persuade children to learn faster,
4. some companies yield to temptation and use questionable methods to assure making a profit, and
5. a low teacher pupil ratio is effective in producing desirable achievement gains.

Certainly these findings should guide educators, school board members and parents whose district contemplates entering into a performance contract.

In order to assist the reader to judge the validity of the above conclusions, two appendices are attached. The first, Appendix A, is a listing of those performance contracts for which evaluative data are available. Included for each contract listed in Appendix A are objectives to be reached, methods of teaching employed, and evaluation of results identified as to the person or organization who made the evaluative statement.

Appendix B contains a bibliography of publications, articles, and news releases dealing with performance contracting. The bibliography has been divided into three main categories, i.e., I. Theoretical discussions, II. Descriptions of contract situations, and III. Evaluative articles. The first category has been further subclassified into A. General statements, B. Contract specifics, C. Favorable, and

D. Unfavorable.

The bibliography is not all-inclusive, since some news items or books are not included. However, this bibliography when combined with that of the New York State Education Department publication, "Performance Contracting in Elementary and Secondary Education," will be quite exhaustive. The period covered by the bibliography (Appendix B) is roughly from May 1970 to October 1972.

APPENDIX A
PERFORMANCE CONTRACTING SUMMARY

APPENDIX A
PERFORMANCE CONTRACTING SUMMARY
School Year 1970-1971

School District	Performance Contractor	Objectives	Methods	Evaluator	Results
Anchorage, Ak.	Quality Education Development	1.0 grade equiv. gain in grades 1-3 1.5 grade equiv. gain in grades 7-9 Rdg. and math	Teaching machines Film strips Tapes Transparencies Kits Workbooks Books Incentives for students & teachers	Battelle	Of 12 tests--2 experimental group test sig.*better than control
Athens, Ga. (Clarke Co.)	Plan Education Centers	.5 grade equiv. gain in grade 1, 1.0 grade equiv. in grades 2, 3, 7-9 Rdg. and math	Programmed texts BRL materials Other materials Some student incentives	Battelle	Of 12 tests--4 experimental group test sig.* better than control ∞
Bronx, N. Y.	Learning Foundations, Inc.	1.0 grade equiv. gain in grades 1-3, 1.1 grade equiv. gain in grades 7-9 Rdg. and math	Teaching machines BRL-Sullivan Some other materials Paraprofessionals Computerized management Teacher/student ratio 1/5 Student incentives Teacher incentives	Battelle	Of 8 tests--3 control group tests sig.* better than experimental
				AFT	Failure Use of corporal punishment *significantly

School District	Performance Contractor	Objectives	Methods	Evaluator	Results
Dallas, Tex.	New Century Division	1.5 grade equiv. gain in grades 9-12 Rdg. and math		Brotman	.3 gain in math .5 gain in reading
Dallas, Tex.	Quality Education Development	1.0 grade equiv. gain in grades 1-3, 1.5 grade equiv. gain in grades 7-9 Rdg. and math	Teaching machines Film strips Tapes Transparencies Computerized management Accelerated learning centers Student incentives Teacher incentives 25 students to teacher and aide	Battelle	Of 12 tests, 6 experimental group tests sig.* better than control
Dallas, Tex.	Thickol Chemical Corporation	Motivation and vocational training Grades 9-12	Emphasize rdg. and math Special voc. courses	Brotman	Control group scored higher than experimental 84% reached some level of employment
Fresno, Calif.	Westinghouse Learning Corp.	1.0 grade equiv. gain in grades 1-3, 7-9	Teaching machines Film strips Tapes Programmed workbooks Learning centers Student incentives	Battelle	Of 12 tests--1 experimental group test sig.* better than control, 5 control group tests sig. better than experimental *significantly

School District	Performance Contractor	Objectives	Methods	Evaluator	Results
Gary, Ind.	Behavioral Research Laboratories	Bring students up to grade level in readg. and math <u>Took over entire school for four years</u>	Programmed materials Workbooks BRL-Sullivan	Rand AFT Berson Brotman	Achievement improving Boring to able students About 1/3 achieved goal High absentee first half Results questionable Excessively costly Taught only rdg. and math first 4 months Regimented program Lock step progression Low morale of students Cash advantage built into contract
Gilroy, Calif.	Westinghouse Learning Corp.	1 grade level gain in rdg. and math in grades 2-4 for Title I students	Learning Centers Tapes 1 teacher and 2 para-professionals per student Student incentives	Rand	Disappointing results Rdg. gain = .6 Math gain = .8 Cost same as remedial program, and more than regular school.
Grand Rapids, Mich.	Alpha Learning Systems	.8 gain in reading and math in grades 1-3, 1.0 grade equiv. gain in same subjects in grades 7-9. For low achievers	Programmed texts of many companies Workbooks 1/14 Teacher/pupil ratio 1/3 to 1/2 day in program Teacher and student incentives	Battelle	Of 12 tests--1 experimental group sig. better than control, 3 control sig. better than experimental

School District	Performance Contractor	Objectives	Methods	Evaluator	Results
Grand Rapids, Mich.	Combined Motivation Educational Systems	1.0 yr. gain in rdg. and math for low achieving 6-9 grades	Learning Centers Teaching machines Tapes Film strips Individualized instr. Student incentives	Rand	District satisfied Rdg. gain 1.2, math gain 1.0
Grand Rapids, Mich.	Westinghouse Learning Corp.	1.0 gain in rdg. and math in grades 1-3, 7-9	Teaching machines Tapes Learning Centers Computerized management instruction Programmed self-instruction	Rand	District satisfied .67 gain in rdg., .58 gain in math
Hammond, Ind.	Learning Found.	1.0 grade equiv. gain in grades 1-3, 1.1 gain in grades 7-9, in rdg. and math	Teaching machine BRL-Sullivan Others Computerized management instruction Paraprofessionals Teacher/student ratio 1/5 Teacher incentives Student incentives	Battelle	Of 12 tests--1 experimental group sig. better than control, 5 control sig. better than experimental
				AFT	Paraprofessionals poor teachers 1/3 of students on or over grade level at beginning

School District	Performance Contractor	Objectives	Methods	Evaluator	Results
Hartford, Conn.	Alpha Learning Systems	.8 grade equiv. gain in grades 1-3, 1.0 grade equiv. gain in grades 7-9	Programmed texts of many companies 1/14 teacher/pupil ratio Some paraprofessionals Student incentives Teacher incentives	Battelle	Of 12 tests--2 control group tests sig. better than experimental
Jacksonville, Fla. (Duval Co.)	Learning Foundations	1.0 grade equivalent gain for grades 1-3, 1.1 grade equiv. gain for grades 7-9 in reading and math	Teaching machines ERL-Sullivan Maximum achievement centers" Carrels Paraprofessionals Student incentives Teacher incentives	Battelle	Of 12 tests--6 experimental group tests sig. better than control group
Las Vegas, Nev. (Clark Co.)	Westinghouse Learning Corp.	1.0 grade equivalent gain for grades 1-3, 7-9 in readg. and math	Teaching machines Film strips Tapes Programmed workbooks Learning centers 1/12 teacher/pupil ratio Student incentives	Battelle	Of 12 tests--1 experimental group test sig. better than control, 5 control sig. better than experimental
McComb, Miss.	Singer/Graflex	.5 grade equiv. gain in grades 1-3, 1.0 grade equiv. gain in grades 7-9, reading and math	Teaching machines Film strips Tapes--Job Corps, SRA, others 40% of staff paraprofessionals Student incentives Teacher incentives	Battelle AFT	Of 12 tests--2 control groups tests sig. better than experimental Control school made more progress than experimental

School District	Performance Contractor	Objectives	Methods	Evaluator	Results
Mesa, Ariz.	Teachers	Raise rdg. and math achievement grades 1-3, 7-9	Books Workbooks Student incentives Teacher incentives	AFT	Experimental and control groups about same
Norfolk, Va.	Learning Research Associates	Raise reading level 1.5 grade equivalents for grades 4-6, 7-9 low achievers	Reading Centers Tapes Workbooks Cassettes 1 teacher and 1 para-professional per 25 students Student incentives	Rand Brotman	El. scores sometimes lower for experimental group Cost more Successful teaching of work attack skills Failure, cost more No sig. difference between control and experimental groups.
Philadelphia, Pa.	Westinghouse Learning Corp.	1.0 grade equiv. gain grades 1-3, 7-9 in reading and math	Teaching machines Tapes Computerized management of inst. Learning centers 1/2 teacher/pupil ratio Programmed materials Student incentives	Battelle Brotman	Of 12 tests--5 control group tests sig. better than experimental No sig. difference between groups in spite of longer experimental testing period

School District	Performance Contractor	Objectives	Methods	Evaluator	Results
Portland, Me.	Singer/Graflex	.5 grade equiv. gain in grades 1-3, 1.0 grade equiv. gain in grades 7-9 in reading and math	Teaching machines Film strips Tapes--Singer Paraprofessionals 1/20 teacher/pupil ratio Student incentives Teacher incentives	Battelle	Of 12 tests--1 experimental group test sig. better than control, 6 control group tests sig. better than experimental
Providence, R. I.	New Century	Raise rdg. scores 1.0 grade equiv. in six months. Grades 2-8	Carrels Tapes Books Workbooks	AFT & Providence Evening Jour.	Average gain .1-.6 rdg. comp.. .6 vocab. Taught to test
Rockland, Me.	Quality Education Development	1.0 grade equiv. gain in grades 1-3, 1.5 grade equiv. gain in grades 7-9. Rdg. and math	Teaching machines Film strips Tapes Transparencies Kits Books Workbooks Student incentives Teacher incentives 1/13 teacher/pupil ratio	Battelle	Of 12 tests-- 1 experimental group sig. better than control, 5 control sig. better than experimental
Seattle, Wash.	Singer/Graflex	.5 grade equiv. gain in grades 1-3, 1.0 grade equiv. gain in grades 7-9. Rdg. and math	Teaching machines BRL-Sullivan Palo Alto rdg. Paraprofessionals Student incentives Teacher incentives	Battelle AFT	Of 12 tests-- 9 control group tests sig. better than experimental Not a success

School District	Performance Contractor	Objectives	Methods	Evaluator	Results
Selmer, Tenn. (McNairy Co.)	Plan Education Centers	.5 grade equiv. gain in grade one, 1.0 grade equiv. gain in grades 2,3,7-9. Rdg. and math	Programmed texts SRA 1/5 teacher/pupil ratio 1 paraprofessional for each teacher A few student incentives	Battelle	Of 12 tests-- 4 experimental group tests sig. better than control, 1 control sig. better than experimental
Stockton, Calif.	Teachers (NEA)	Raise student reading above what it was before	Books Workbooks	AFT	Control and experimental results about same
Taft, Texas	Alpha Learning Systems	.5 grade equiv. gain in grades 1-3, 1.0 grade equiv. gain in grades 7-9	Programmed texts and workbooks of many companies	Battelle	Of 12 tests--2 experimental group tests sig. better than control, 1 control sig. better than experimental

School District	Performance Contractor	Objectives	Methods	Evaluator	Results
Texarkana, Ark.	Dorsett (1969-70)	Raise student scores 1.0 in reading and math Lower drop-out rate	Air-conditioned trailers Wall to wall carpeting Dorsett teaching machines Workbooks Kits Student incentives	Rand	Drop-out rate reduced to 6.8 Test results contaminated
				AFT	Teaching to test
	Educational Development Laboratories (1970-71)	Raise reading scores Raise math scores Lower drop-out rate	BRL-Sullivan Trailers as above	Rand	Gains not met Cost more. .48 average gain in reading, .31 average gain in math. Lowered drop-out to 4.3%
				Brotman	Drop-out rate reduced to 4.3% Exceedingly poor result 24% reached goal
				AFT	Gains disappointing 24% gained 1.0 or more in rdg. and math

School District	Performance Contractor	Objectives	Methods	Evaluator	Results
Wichita, Kan.	Plan Education Centers	.5 grade equiv. gain in grades 1-3, 1.0 grade equiv. gain in grades 7-9. Reading and math	Programmed texts Few machines 32L-Sullivan and many other materials 1/5 teacher/pupil ratio One paraprofessional to each teacher Partly individualized instruction	Battelle	Of 12 tests--1 experimental group test sig. better than control, 2 control sig. better than experimental

APPENDIX B
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APPENDIX B
BIBLIOGRAPHY

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